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(56) Documents Cited
GB 2227616 A

(58) Field of Search
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(54) Abstract Title
Adaptor for mains socket

(57) An adaptor for providing a mains socket at a more convenient height comprises a plug portion 12, a housing 11 and a socket 16. The plug portion 12 plugs into a low level mains socket 14, and is connected by cabling in the upwardly extending housing to the socket 16. The housing 11 is mounted on the wall, preferably by screws 21 or by a hook and loop fastening. The adaptor may be fused and contain a switch, and may have an additional low level socket 22.

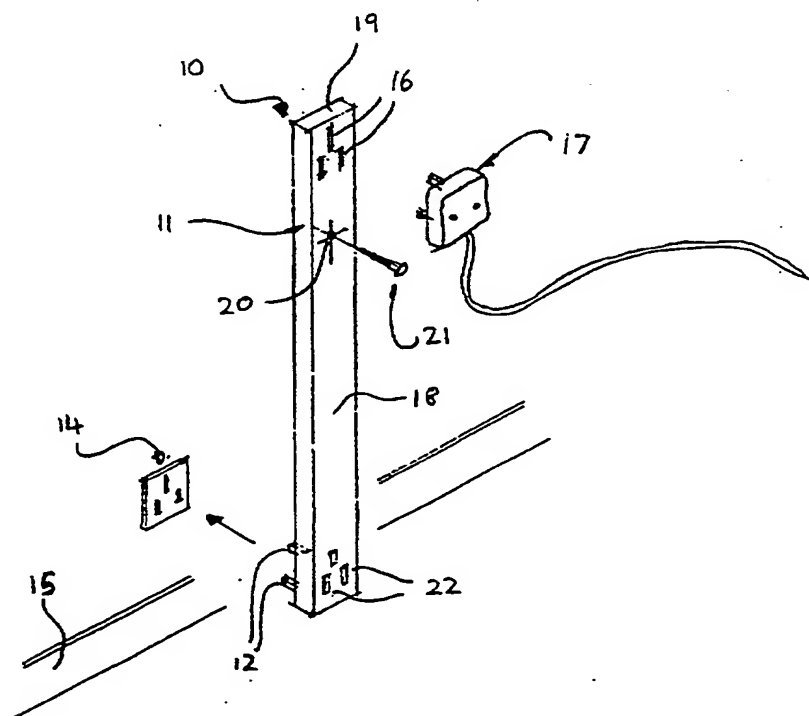


Fig. 1

The claims were filed later than the filing date but within the period prescribed by Rule 25(1) of the Patents Rules 1995.

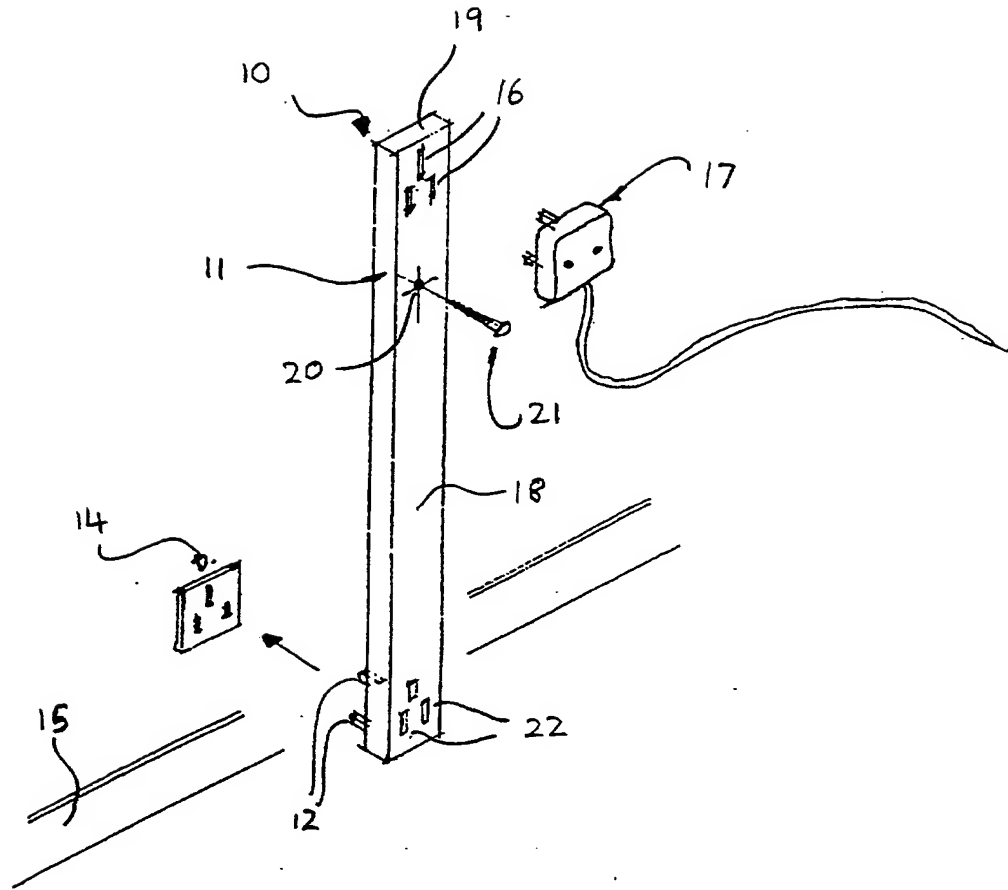


Fig. 1

ADAPTOR

Conventionally, domestic electric plug sockets are located at a low level in a wall, adjacent to the skirting, in order that they do not impose upon the overall appearance of the room.

The provision of plug sockets in such locations does not present a problem to able bodied persons however these locations can be very awkward for the elderly or for disabled, e.g. wheel-chair-bound persons, to reach. Accordingly, some plug sockets are inaccessible and unusable by such persons.

Previous electrical adaptors have been designed to allow a power supply to be moved around a room. However as they have been fitted with a flexible cable to allow the freedom of movement, these adaptors have to be placed either on the floor or on another surface.

It is an object of the present invention to provide an electrical adaptor which overcomes these problems and provides a power socket at a convenient height.

According to the present invention, an adaptor comprises an elongate housing containing a longitudinal duct, the housing being arranged to be mounted on a wall surface extending upwards from adjacent to the floor level, the housing having, adjacent to the lower end of its inner wall facing surface, at least one projecting conductor pin which is arranged to be received in a complementary wall socket, and, adjacent to its upper end, at least one terminal-containing hole for receiving a plug, the at least one terminal being electrically connected via cabling in the duct with a respective conductor pin.

The terminal-containing holes may be arranged in the same array as the conductor pins.

The terminal-containing holes may be located in the upper or outer face of the housing.

Preferably, the housing has a length of 900mm plus or minus 200mm. This will ensure that the holes for receiving

a plug are located at a convenient height, adjacent to conventional work top height, for anyone, and in particular wheel-chair confined people, to use.

5 The housing may be formed as a single section or alternatively may be three sections, wherein the middle section can be cut by a user to a size which suits their particular requirements.

The extension adaptor may be fused and also may be provided with an on/off switch.

10 Preferably, the conductor pins mimic those of a conventional domestic 13 amp square pin plug.

While the invention is primarily concerned with voltage transmission, it is envisaged that the pins may be of the type used in telephone sockets, to enable a
15 telephone, a fax or a modem to be connected.

The device may be temporarily fixed to the wall by means of e.g. velcro^(R). Alternatively, the device may be provided with screw hole(s) for a more permanent fixing to the wall.

20 The device may be provided with more than one array of terminal-contained holes so that multiple plugs may be connected.

An example of the present invention will now be described with reference to the accompanying drawing which
25 shows a perspective view of an electrical adaptor according to the present invention.

Figure 1 shows an electrical adaptor 10 which has a semi rigid plastics housing 11 containing a longitudinal duct (not shown). The housing 11 is provided with an array
30 of conductor pins 12 which project from the inner face 13 of the housing 11 and which are arranged to be received in a wall-mounted plug socket 14. The socket 14 is located at a low level on a wall, adjacent to a conventional skirting board 15.

35 Holes 16 are located at the other end of the housing 11 and are arranged, in this example, to receive a standard 13 amp square pin plug 17 but may be arranged to receive

plugs of different two or three pin configurations. The holes 16 are located in an outer face 18 of the housing 11 but it is envisaged, however, that the holes 16 may be located in an upper face 19 of the housing.

5 The housing 11 is provided with a screw hole 20 for receiving a screw 21 so that the housing 11 can be fixed to the wall. The housing 11 also contains a further array of terminal-containing holes 22, at the same end as the pins 12, for receiving another plug.

10 In use, the electrical adaptor 10 provides a fast and simple means of transferring power to a convenient height from a conventional socket for elderly or disabled persons to use. The device can be fitted easily in existing homes to minimise any disruption such as redecorating and, unlike
15 a permanent wall socket, the device can be removed if no longer required.

CLAIMS

1. An adaptor comprises an elongate housing containing
5 a longitudinal duct, the housing being arranged to be
mounted on a wall surface extending upwards from adjacent
to the floor level, the housing having, adjacent to the
lower end of its inner wall facing surface, at least one
projecting conductor pin which is arranged to be received
10 in a complementary wall socket, and, adjacent to its
upper end, at least one terminal-containing hole for
receiving a plug, the at least one terminal being
electrically connected via cabling in the duct with a
respective conductor pin.
- 15 2. An adaptor according to claim 1, wherein the
terminal-containing holes are arranged in the same array
as the conductor pins.
- 20 3. An adaptor according to claim 1 or 2, wherein the
terminal-containing holes are located in the upper or
outer face of the housing.
4. An adaptor according to any of claims 1 to 3,
25 wherein the housing has a length of 900mm plus or minus
200mm.
5. An adaptor according to any preceding claim, wherein
the housing is formed as one single section or three
30 sections, wherein with the latter the middle section can
be cut by a user to a size which suits their particular
requirements.
6. An adaptor according to any preceding claim, wherein
35 the adaptor is fused and is provided with an on/off
switch.

7. An adaptor according to any proceeding claim, wherein the conductor pins mimic those of a conventional domestic 13 amp square pin plug.



Application No: GB 9912045.3
Claims searched: 1 - 7

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Examiner: Paul Nicholls
Date of search: 24 May 2000

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:
UK CI (Ed.R): H2E (ECSX, ECHC, ECHU)
Int CI (Ed.7): H01R 27/02, 31/06, 33/72
Other:

Documents considered to be relevant:

| Category | Identity of document and relevant passage | Relevant to claims |
|----------|---|--------------------|
| X | GB 2,227,616 A (JONES) - See figures 1, 2 and 4 | 1 - 7 |

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| X | Document indicating lack of novelty or inventive step | A | Document indicating technological background and/or state of the art. |
| Y | Document indicating lack of inventive step if combined with one or more other documents of same category. | P | Document published on or after the declared priority date but before the filing date of this invention. |
| & | Member of the same patent family | E | Patent document published on or after, but with priority date earlier than, the filing date of this application. |